85325
S/142/60/003/004/010/013
E032/E314

24.2700

AUTHOR: Andreyev, S.N.

TITLE: Graphs for Calculating the Power Distribution in Cylindrical Bodies and High-frequency Fields

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Radiotekhnika, 1960, Vol. 3, No. 4, pp.508 - 512

TEXT: Experimental and theoretical data suggest that, in practice, it is not possible to achieve a uniform distribution of power right through a cylindrical body subjected to radio-frequency heating [1]. The specific power liberated in the material is given by:

$$p_o = \omega \varepsilon_o \varepsilon'' \breve{E}^2$$

where ω is the angular frequency,
$\varepsilon_o = 0.886$ pF/cm, and
E is the electric-field strength.

It is clear from Eq. (1) that the best way of increasing the

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E032/E314

Graphs for Calculating the Power Distribution in Cylindrical Bodies and High-frequency Fields

power dissipated is to increase the magnitude of E. However, E can only be increased up to a certain critical value E_{cr}. Further increase in the intensity of the electric field leads to electrical breakdown. The power dissipated can also be increased by increasing the frequency but this leads to a nonuniform distribution of the electric field and, consequently, to a nonuniform distribution of the power dissipated. The electric-field distribution in a cylinder of radius r_o, and with the electric field applied as shown in Figure 1, is calculated assuming that the material is uniform and that its electrical parameters are constant. In reality, ε' and $\tan\delta$ depend on the temperature but the introduction of these dependences would complicate the analysis too much. The solutions of the electromagnetic field equations for the case of the cylindrical specimen illustrated in Fig. 1 are the Bessel functions:

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Graphs for Calculating the Power Distribution in Cylindrical Bodies and High-frequency Fields

$$\dot{E} = E_o J_o(\xi) \qquad (2)$$

where

$$\xi = r\omega\sqrt{\mu_o\varepsilon_o\varepsilon} = \frac{r2\pi f}{\frac{1}{\sqrt{\mu_o\varepsilon_o}}}\sqrt{\varepsilon} = \frac{2\pi}{\frac{c}{f}}\sqrt{\varepsilon} =$$

$$= \frac{2\pi r}{\lambda_o}\sqrt{\varepsilon} = \frac{2\pi r}{\lambda}e^{-j\delta/2}$$

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Graphs for Calculating the Power Distribution in Cylindrical Bodies and High-frequency Fields

$\lambda = \lambda_o / \sqrt{\varepsilon}$ is the wavelength in the heated material.

E_o is the electric-field strength on the axis of the cylinder and

$\varepsilon = \varepsilon e^{-j\delta} = \varepsilon' - j\varepsilon''$ is the complex dielectric constant of the material.

When the parameters ε', $\tan\delta$ and the generator frequency are known, the electric-field distribution in the material can be obtained with the aid of the chart shown in Fig. 2, which was calculated by the author from the data given in Watson's Theory of Bessel Functions. This chart is more comprehensive than the chart given in Jahnke and Emde ("Tables of Functions"). Figs. 3-5 give further graphs which can be used in conjunction with the chart in Fig. 2.

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85325

S/142/60/003/004/010/013
E032/E314

Graphs for Calculating the Power Distribution in Cylindrical Bodies and High-frequency Fields

There are 5 figures and 5 references: 4 Soviet and 1 English.

ASSOCIATION: Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo ordena Lenina energeticheskogo instituta (Department of Theoretical Foundations of Electrical Engineering of the Order of Lenin Moscow Power Institute)

SUBMITTED: October 27, 1959

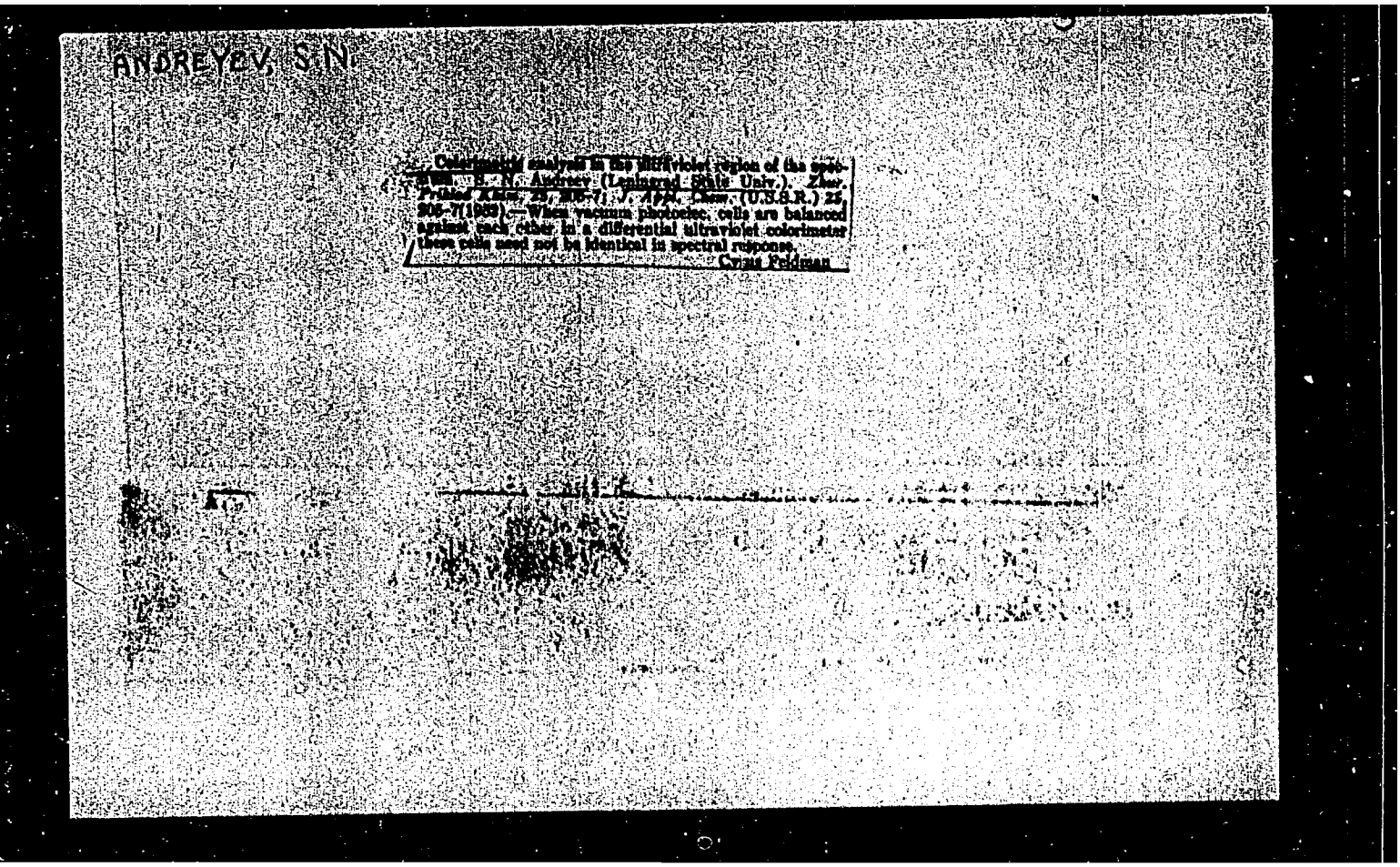
Card 5/5

[illegible], S. N.

Investigations in the Field of Unsaturated [illegible] Their Halogen Derivatives. XI. The Mechanism of Conjugated Dehydration and Dehalogenation Reaction, N.A.Domnin, V.A.Chernyshov, S.N.[illegible], Lab. [illegible] A. [illegible], Leningrad State University. Zhur Ob Khim, Vol 21, No 1[illegible], pp 1[illegible]-1[illegible]3, Oct [illegible]

Ultraviolet absorption spectroscopy [illegible] action of [illegible] on 1,2-dibromocyclohexane, quinoline on cyclohexadiene-1, [illegible], and quinoline [illegible] on cyclohexadiene-1, 3 and [illegible] produce [illegible] contg resp 10-20%, 85-90%, and ∼ 3[illegible] benzene. First state of conversion of polyhalogen derivs of cyclohexane into aromatic compds on heating with quinoline [illegible] formation of 6-membered ring with conjugated [illegible] bonds.

[illegible]



ANDREYEV, A.N.
Spectral
Journal Technique
Laboratory Apparatus

2616. Colorimetric analysis in the ultra-violet region of the spectrum. S. A. Schukarev and S. N. Andreev (*J. anal. Chem., USSR*, 1953, 8, 22–32). Use is made of the cryst. filters of Stekhanov (*v. supra*). The method is applied to the determination of benzene (~0·003%) in ethanol without preliminary treatment, naphthalene in ether, anthracene in oils, etc. G. S. Smith.

MF 7-27-54

ANDREYEV, S. N.

Light Filters for Colorimetric Analysis in the Ultraviolet Region of the Spectrum, S.N.Andreyev and [illegible], Zhur Prikl Khim, Vol [illegible], No 1, pp [illegible]-88, Jan 5[illegible]

Light filters were prepd on a mixed crystal base for ultraviolet. These filters are opaque in the visible region up to [illegible],6[illegible] A inclusive, having transmission max at 2,[illegible], [illegible],600 and [illegible],700 A. A liquid light filter was prepd with the comp 1.1 moles liter of Cl_2 + 0.1[illegible] moles liter of Br_2 + CCl_4, which filter is opaque in the region 6,000 to 3,[illegible] A and transmittent between 3,[illegible] and 3,[illegible] A. Light filters were prepd on a basis of borate glass with admixtures of K_2CrO_4 and $NiSO_4$. They had transmission max at 3,1[illegible], 3,1[illegible], [illegible],2[illegible], and 3,3[illegible] A. A light filter was prepd on a film base. It had a transmission max at 3,130 A.

257T37

ANDREYEV, S.N.

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USSR

Determination of small quantities of carbon disulfide and acetone by colorimetry in the ultraviolet. S. N. Andreev and R. I. Ginding. *J. Appl. Chem. U.S.S.R.* 26, 89-93 (1953)(Engl. translation).—See *C.A.* 47, 5300i, H, I, II.

ANDREYEV, S. N.

4

(2)

B. T. R.
Vol. 3 No. 4
Apr. 1954
Physics

6625 Infrared Absorption Spectrum of Liquid Water in the 3200 to 3600 Cm^{-1} Region. S. N. Andreyev and T. G. Galicheva. *National Science Foundation Translation*, no. 68, Sept. 1953, 3 p. (Original in *Doklady Akademii Nauk SSSR*, v. 90, 1953, p. 149-151.)

Presents a detailed study of absorption band. Graph, table. 13 ref.

AF 11-5-54

③

Infrared absorption spectrum of liquid water in the 3200- to 3600-cm.$^{-1}$ region. S. N. Andreev and T. G. Balicheva (A. A. Zhdanov State Univ., Leningrad). *Doklady Akad. Nauk S.S.S.R.* 90, 149-51(1953); (Engl. translation issued as *U.S. Atomic Energy Comm.*, NSF-tr-66).—The valence vibrations of H_2O were studied by using a quartz prism, slit widths from 0.02 to 0.07 mm., and a vacuum thermocouple (sensitivity 28 v./w.). One figure is given in which the detailed spectrum obtained is compared with that of Gordy (*C.A.* 32, 4877^4). The data are best explained by Batuyev's frequency-modulation theory (*C.A.* 45, 3700g) applied to HO-H·····OH_2 type complexes.
R. L. McClellan

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10/5/54

ANDREYEV, S.N.; KHALDIN, V.G.; TERENIN, A.N.' akademik.

Development of trans-influence in absorption spectra of Pt (IV) complex compounds of the chloramine series. Dokl.AN SSSR 90 no.5:787-790 Je '53. (MLRA 6:5)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova (for Andreyev, Khaldin). 2. Akademiya nauk SSSR (for Terenin). (Absorption spectra) (Platinum organic compounds)

ANDREYEV, S.N.

USSR/ Chemistry - Spectral analysis

Card 1/1 : Pub. 145 - 2/14

Authors : Shchukarev, S. A.; Andreyev, S. N.; and Sapozhnikova, O. V.

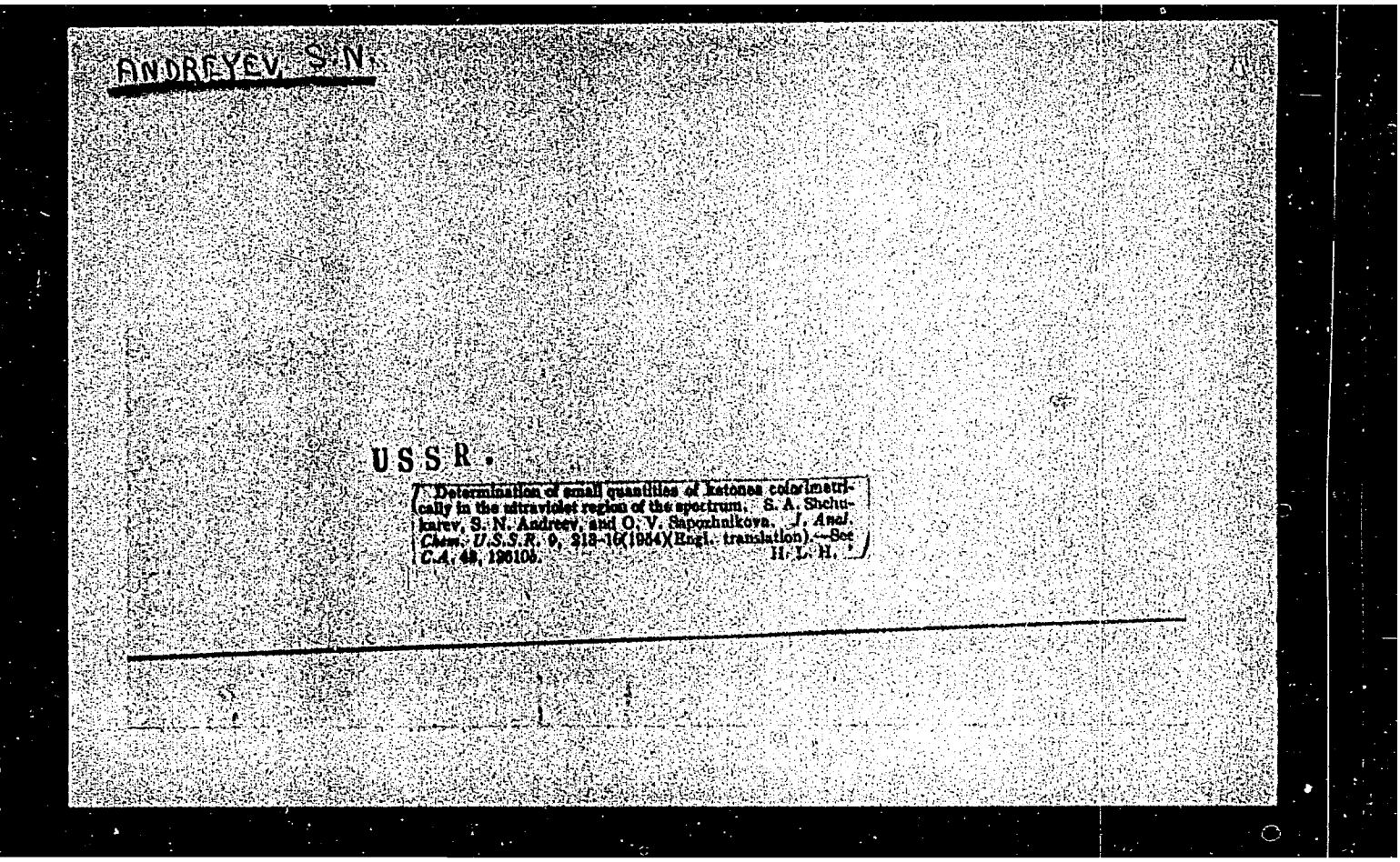
Title : Determination of small ketone amounts by colorimetering in the ultraviolet zone of the spectrum

Periodical : Zhur. anal. khim. 9/4, 193-195, Jul-Aug 1954

Abstract : The applicability of the colorimetering method for quantitative analysis of various aliphatic ketones was investigated. The objects used in this investigation were the following aqueous ketone solutions: acetone, methylethylketone, pentanone-2, hexanone-2, heptanone-2 and octanone-2. The relative accuracy of the analysis attained by this method was 0 - 15%. It was established that the colorimetering of acetone solutions in the presence of formaldehyde is possible also at a acetone-formaldehyde concentration ration of 1 : 100. Nine references: 2-English; 2-German and 5-USSR (1901-1953). Tables; graphs.

Institution : The A. A. Zhdanov State University, Leningrad

Submitted : December 9, 1953



ANDREYEV, S.N.

USSR

Determination of aliphatic alcohols colorimetrically in the ultraviolet range of the spectrum. S.A. Shchukarev, S. N. Andreev, and L. A. Ostrovskaya (A. A. Zhdanov State Univ., Leningrad). *Zhur. Anal. Khim.* 9, 354–8(1954); cf. *C.A.* 47, 4784*i*.—The method utilizes ultraviolet absorption of alkyl nitrites. The latter are formed by the action of HNO_2 on alcs. according to: $ROH + HNO_2 = RNO_2 + H_2O$. The nature of *R* has an insignificant effect on the absorption. Alkyl nitrites have a wide absorption band in the range 400–330 mμ with 3 peaks at 380, 355, and 345 mμ. The detn. is carried out with a filter which screens out the 2 end peaks transmitting only in the range around 360 mμ. For the analysis take 20 ml. of H_2SO_4-washed petr. ether (35–100° fraction), 20 ml. of the soln. to be analyzed, and 1 ml. 5*N* HCl in a separatory funnel. To it add 2 ml. of 25% aq. $NaNO_2$ and shake the mixt. for 5 min. Transfer the petr. ether layer to another separatory funnel contg. 20 ml. of 10% $NaHCO_3$ or 0.1*N* NaOH. Shake the mixt. to remove N oxides, transfer the petr. ether layer to a cylindrical cell with quartz windows, and compare with a similar cell filled with pure petr. ether. Read the results on a calibration curve. Individual alcs. can be detd. with a relative error of 1–20%; the sum of alcs. can be detd. with a calibration curve prepd. with BuOH, with a relative error of 11–21%, MeOH excepted. M. Hosch

ANDREYEV, S.N.

USSR

√Determination of aliphatic alcohols colorimetrically in the ultraviolet range of the spectrum. S. A. Shchukarev, S. N. Andreev, and I. A. Ostrovskaya. *J. Anal. Chem. U.S.S.R.* 9, 303-7(1954)(Engl. translation).—See *C.A.* 49, 14594. H, L. H.

AUTHORS: Stroganov, Ye.V., Kozhina, I.I., Andreyev, S.N. 54-10-2-11/16

TITLE: The Structure of the Crystal $CoCl_2 \cdot 6H_2O$ (Struktura kristalla $CoCl_2 \cdot 6H_2O$)

PERIODICAL: Vestnik Leningradskogo Universiteta, Seriya fiziki i khimii, 1958, Vol. 10 Nr 2, pp. 109-116 (USSR)

ABSTRACT: Among the cobalt chlorides with different crystallization water content the compound $CoCl_2 \cdot 6H_2O$ has not yet been investigated with respect to its crystalline structure. The authors undertook to do this, hoping that knowledge of a new structure would contribute towards generalizing these crystal hydrates. As a result of radiostructural investigation the structure of the crystal $CoCl_2 \cdot 6H_2O$ was determined. The crystal is composed of ions Co^{2+}, Cl^- and H_2O molecules. The water molecules occur in the crystal in two states: 2/3 of all water molecules are in the immediate vicinity of the ions Co^{2+}. The distances between the centers of the water particles and the center of the ion Co^{2+} amount to 2.12 kX. 1/3 of all water molecules is far away from the particles Co^{2+} (3.20 kX). The water molecules which are nearest to the cobalt

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The Structure of the Crystal $CoCl_2 \cdot 6H_2O$

54-10-2-11/16

form groups of 4 round each of the Co^{2+} ion and form a rectangle in the center of which the Co^{2+} is located. The water molecules located at a greater distance are grouped along a straight line from both sides of this rectangle. This line passes through the center of the rectangle and with its normal forms an angle of 40°. In the series of chlorine cobalt crystals with different content of crystallization water the anion particles in the octahedral vicinity of Co^{2+} ions are replaced by water molecules with an increasing water content in the crystal. Chlorine cobalt hexahydrate can be considered to be a complex compound. It consists of an octahedral complex $[Co^{2+} \cdot 4H_2O \cdot 2Cl^-]$ and 2 water molecules which border immediately upon the Cl^- anions. It is rational to ascribe the chemical formula $[Co(H_2O)_4Cl_2] \cdot 2H_2O$ to this substance in solid condition. There are 3 figures, 5 tables, and 3 references, allof which are Soviet.

SUBMITTED: November 19, 1957

AVAILABLE: Library of Congress

Card 2/2 1. Crystals—Structure 2. Crystal hydrates—Structural analysis

5 (4)

AUTHORS: Andreyev, S. N., Stroganov, Ye. V., Khaldin, V. G.

SOV/79-29-5-75/75

TITLE: A Subject of Discussion (V poryadke diskussii). On the Applicability of the Equation by A. F. Kapustinskiy for the Computation of the Energy of Crystal Lattices of Complex Salts (O primenimosti uravneniya A. F. Kapustinskogo dlya rascheta energii kristallicheskikh reshetok kompleksnykh soley)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 5, pp 1753 - 1757 (USSR)

ABSTRACT: This is a discussion dealing with the suggestion made by K. B. Yatsimirskiy that the radius of the complex ion be introduced into Kapustinskiy's equation for the computation of lattice energies of tetrahedric and octahedric complex salts. For this purpose the ion radius was determined from the X-ray structural data for 18 such complex ions and compared with the calculations from the Kapustinskiy formula (Table). For salts with ions CrO_4^{-2}, SO_4^{-2}, ClO_4^{-} and $MX_6^{\pm 2}$ (of the structure type $K_2[PTCl_6]$) a good agreement is obtained. Thus, the equation by A. F. Kapustinskiy may be

Card 1/2

A Subject of Discussion. On the Applicability of the Equation by A. F. Kapustinskiy for the Computation of the Energy of Crystal Lattices of Complex Salts

SOV/79-29-5-75/75

well used for the determination of lattice energies of tetrahedric and octahedric complex salts. The authors thank K. P. Mishchenko for valuable critical remarks. There are 1 table and 11 references, 6 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: May 30, 1958

Card 2/2

USCOMM-DC-61,255

5(2)
AUTHORS: Andreyev, S. N., Khaldin, V. G., Stroganov, Ye. V. SOV/79-29-6-6/72

TITLE: Hydration Heats of the Ions $Me(H_2O)_6^{+2}$ (O teplotakh gidratatsii ionov $Me(H_2O)_6^{+2}$)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 1798-1801 (USSR)

ABSTRACT: The investigation of the hydrate sheaths of ions in solutions was hitherto one of the most difficult problems, since physico-chemical methods are missing, which permit the investigation of the state of the water molecules isolated from the remaining mass of the solvent, which envelop the ions. The manifoldness of the chemical properties of the ions is another difficulty to be met with in this investigation. For the solution of this problem a many-sided investigation of the aquo-ions which are constituents of the crystal lattice of the crystal hydrates of different salts, and the investigation of the properties of the water molecules which envelop the ions in the crystal hydrates could be of decisive importance. On the basis of the papers by K. B. Yatsimirskiy (Refs 1-5) the authors arrived at the conclusion that the

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investigation of the hydration heats of the aquo-ions $Me(H_2O)_6^{+2}$ initiated by this scientist had to be continued. For this purpose one should start with the crystal hydrates, the crystal lattices of which are already thoroughly investigated with respect to their structure. Also in the present case the data of a X-ray analysis confirmed the presence of the ions $Me(H_2O)_6^{+2}$ in the molecule of the crystal hydrates. The addition energy of the water molecules onto the ions Me^{+2} as well as the hydration heat of the aquo-ions $Me(H_2O)_6^{+2}$ can be determined if the primary integral heats of solution and energy of the crystal lattices of the salts are known. On the basis of the primary integral solution heats of the crystal hydrates of the metal perchlorides the standard formation heats of the following compounds were determined: $Zn(ClO_4)_2 \cdot 6H_2O$, $Cd(ClO_4)_2 \cdot 6H_2O$, $Mn(ClO_4)_2 \cdot 6H_2O$, $Fe(ClO_4)_2 \cdot 6H_2O$, $Co(ClO_4)_2 \cdot 6H_2O$, $Ni(ClO_4)_2 \cdot 6H_2O$. According to the equation of A. F. Kapustinskiy (Ref 10) the energy

Hydration Heats of the Ions $Mo(H_2O)_6^{+2}$

SOV/79-29-6-6/72

values of the crystal lattices of the crystal hydrates of the perchlorates Mg, Zn, Cd, Mn, Fe, Co, and Ni were determined, the formation heats of the aquo-ions $Mg(H_2O)_6^{+2}$, $Zn(H_2O)_6^{+2}$, $Cd(H_2O)_6^{+2}$, $Mn(H_2O)_6^{+2}$, $Fe(H_2O)_6^{+2}$, $Co(H_2O)_6^{+2}$, $Ni(H_2O)_6^{+2}$, the energy values of the addition of water to the ions Me^{+2} in the gaseous phase and their hydration heats of the ions $Me(H_2O)_6^{+2}$. These results are in agreement with those obtained by K. B. Yatsimirskiy. It was shown that the hydration heats of the aquo-ions form about the half of the hydration heat of the ions Me^{+2}. The water molecules in the aquo-ion $Me(H_2O)_6^{+2}$ are considerably polarized. These aquo-ions are so-called "Aqua Acids" (Refs 17-19). The authors express their gratitude to A. F. Kapustinskiy and K. P. Mishchenko for valuable advice. There are 3 tables and 19 references, 16 of which are Soviet.

Card 3/4

Hydration Heats of the Ions $Me(H_2O)_6^{+2}$ SOV/79-29-6-6/72

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: May 30, 1958

Card 4/4

5 (2)

AUTHORS: Shchukarev, S. A., Andreyev, S. N., Borisova, Z. U. SOV/79-29-8-2/81

TITLE: On the Enthalpy of Dissolution of the Hexahydrate of Zinc Perchlorate

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2468 - 2470 (USSR)

ABSTRACT: Exact data on the heat of the solution process of various crystallo-hydrates are material for the elaboration of the thermodynamic theory of the solubility of salts, as well as for the concept of the chemical nature of the crystal hydrates themselves. Nothing has hitherto been published on the heats of solution of the hexahydrate $Zn(ClO_4)_2 \cdot 6H_2O$, which is therefore the task of the present paper. Preparation and analysis of the above hydrate are described in detail. In the dissolution of this freshly precipitated hydrate, containing a small excess of mother liquor, comparatively low heats were obtained, as may be seen from figure 1. As was expected, this excess of mother liquor decreases numerically the endothermic effect of the solution of the salts, since the dilution of the saturated solution

Card 1/2

On the Enthalpy of Dissolution of the Hexahydrate of Zinc Perchlorate SOV/79-29-8-2/81

is an exothermic process. The hydrate desiccated within 24 hours contained 6 molecules of water and yielded a maximum heat of solution, its value approaching closely that obtained by the methods described above. This heat decreases numerically with further desiccation. The data given show that a minimum of dehydration, within the limit of error, leads to a considerable decrease of the heat of solution. The experimental data lead to the conclusion that the preparation desiccated within 24 hours is most useful for the determination of the heat of solution. The values obtained for this heat at various dilutions are shown in table 2 and in figure 2 (dilutions 1 : 1000 to 1 : 7). There are 2 figures, 2 tables, and 4 Soviet references.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: June 10, 1958

Card 2/2

ANDREYEV, S.N.; SHCHUKAREV, S.A.; BALICHEVA, T.G.

Vibrational spectra of the water of crystallization in the single crystals $NiSO_4 \cdot 7H_2O$, $NiSO_4 \cdot 6H_2O$ and $CaSo_4 \cdot 2H_2O$ in the region of the fundamental frequency for the valence vibrations of O-H. Zhur. struk. khim. 1 no.2:183-188 Jl-Ag '60. (MIRA 13:9)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova
(Nickel sulfate--Spectra) (Calcium sulfate--Spectra)
(Crystallization, Water of--Spectra)

STROGANOV, Ye.V.; KOZHINA, I.I.; ANDREYEV, S.N.; KOLYADIN, A.B.

Crystal structure of crystal hydrate salts of transition metals. Part 2: Structure of the crystal $NiCl_2.4H_2O$. Vest. LGU 15 no.4: 130-137 '60. (MIRA 13:2)
(Nickel chloride crystals)

STROGANOV, Ye.V.; KOZHINA, I.I.; ANDREYEV, S.N.

Structure of crystals of $NiCl_2 \cdot 6H_2O$. Vest LGU 15 no.16:109-112 '60. (MIRA 13:8)

(Nickel chloride)

ANDREYEV, S.N.; KHALDIN, V.G.

Complex formation in the system $CoCl_2$ - HCL - H_2O. Dokl.AN SSSR 134 no.2:345-348 S '60. (MIRA 13:9)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Predstavleno akad. I.I.Chernyayevym.
(Cobalt compounds)

[illegible], S.I.; [illegible]; [illegible]

Structure of [illegible] ion in aqueous solution. [illegible] 1:[illegible]-1[illegible] [illegible].
([illegible])

1. [illegible] universitet im. [illegible]
([illegible]--Spectra)

ANDREYEV, Sergey Nikolayevich

Calculation of the field of a flat condenser considering the border effect. Izv.vys.ucheb.zav.; elektromekh. 4 no.8:3-17 '61. (MIRA 14:8)

1. Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo energeticheskogo instituta.
(Electric capacitors)

STROGANOV, Ye.V.; ANDREYEV, S.N.; KOZHINA, I.I.; SOLOV'YEV, V.Ye.

Crystal structure of crystal hydrates of transition metal salts Part 3: $CoBr_2 \cdot 6H_2O$ crystal structure. Vest LGU 16 no.16:114-119 '61. (MIRA 14:8)

(Cobalt halides)
(Crystal lattices)

SHCHUKAREV, S.A.; ANDREYEV, S.N.; BALICHEVA, T.G.; NECHAYEVA, L.N.

Infrared absorption spectra of aqueous solutions of some perchlorates in the region of the fundamental frequency of O-H valence oscillations. Vest LGU 16 no.16:120-124 '61.
(MIRA 14:8)

(Perchlorates--Spectra)

SHCHUKAREV, S.A.; ANDREYEV, S.N.; BALICHEVA, T.G.

Infrared spectra of perchloric acid and its solutions in the region of 3700 - 2300 cm^{-1}. Vest. LGU 17 no.4:128-134 '62. (MIRA 15:3)
(Perchloric acid-spectra)

ANDREYEV, S. N.: KHALDIN, V. G.

Composition and structure of complexes in aqueous solutions of bivalent cobalt halides. Zhur. ob. khim. 32 no.12:3845-3852 D '62. (MIRA 16:1)

1. Leningradskiy gosudarstvennyy universitet.

(Cobalt halides) (Complex compounds)

ANDREYEV, S.N.; KHALDIN, V.G.

Complex formation in the system $CoBr_2$ - HBr - H_2O.
Dokl. AN SSSR 143 no.2:335-337 Mr '62. (MIRA 15:3)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.
Predstavleno akademikom I.I.Chernyayevym.
(Cobalt compounds)
(Bromides)

SHCHUKAREV, S.A.; ANDREYEV, S.N.; BURKOV, K.A.

Complex formation in the system $NiCl_2$ - HCl - H_2O. Dokl.AN SSSR 144 no.2:371-373 My '62. (MIRA 15:5)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Predstavleno akademikom I.I.Chernyayevym.
(Nickel chlorides) (Hydrochloric acid) (Complex compounds)

B 3131
S/020/62/144/003/029/030
B124/B101

11,2115

AUTHORS: Shchukarev, S. A., Andreyev, S. N., and Balicheva, T. G.

TITLE: Vibrational spectra of perchloric acid in the liquid and gaseous state

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 3, 1962, 606-608

TEXT: The state of the OH bond in perchloric-acid molecules in the gas phase, anhydrous 100% $HClO_4$, and solid $HClO_4 \cdot H_2O$ was studied in the region of fundamental-tone valence frequency vibrations of OH. The respective vibrational spectra were investigated using the recording infrared spectrometer ИКС-14 (IKS-14) and the nonrecording infrared spectrometer ИКС-6 (IKS-6) (Fig. 1). Calibration was performed using the rotation vibration spectra of NH_3, HCl, HBr, CO, CH_4, and C_6H_6. Results: (1) Gaseous $HClO_4$ is monomeric in the same way as a 0.001 M solution of $HClO_4$ in CCl_4. (2) The line-shift of anhydrous $HClO_4$ amounting to 170 cm^{-1} is accounted for by the H bonds which have an energy amounting

Card 1/2

ANDREYEV, Georgiy Pavlovich; ANDREYEV, Sergey Nikolayevich; BOGOLYUBOV, Valentin Yevgen'yevich; BURDAK, Nadezhda Mironovna; ZHUKHOVITSKIY, Boris Yakovlevich; ZEVEKE, Georgiy Vasil'yevich; KARAYEV, Ruben Iosifovich; LEVITAN Semen Arkad'yevich; MUKHIN, Aleksandr Andreyevich; NEGNEVITSKIY, Iosif Borisovich; PEREKALIN, Mikhail Aleksandrovich; POLIVANOV, Konstantin Mikhaylovich, prof., doktor tekhn.nauk; FRIDKIN, L.M., tekhn. red.

[Problems of theoretical principles of electrical engineering; theory of networks]Zadachnik po teoreticheskim osnovam elektrotekhnik; teoriia tsepei. [By]G.P.Andreev i dr. Moskva, Gosenergoizdat, 1962. 159 p. (MIRA 15:12)
(Electric engineering) (Electric networks)

SHCHUKAREV, S.A.; STROGANOV, Ye.V.; ANDREYEV, S.N.; PURVINSKIY, O.F.

Crystal structure of the crystal hydrates of transition metal salts. Structure of $CoI_2 \cdot 6H_2O$. Zhur.strukt.khim. 4 no.1:63-66 Ja-F '63. (MIRA 16:2)

1. Leningradskiy gosudarstvennyy universitet.
(Cobalt iodides) (Crystallography)

ANDREYEV, Sergey Nikolayevich, starshiy prepodavatel'

Capacitance of the rim of a ribbon capacitor with large specific inductive capacitance of the dielectric. Izv. vys. ucheb. zav.; elektromekh. 6 no.4:523-526 '63. (MIRA 16:7)

1. Kafedra teoreticheskikh osnov elektrotekhniki Moskovskogo energeticheskogo instituta.
(Dielectrics) (Condensers (Electricity))

ANDREYEV, S.N.; BALICHEVA, T.G.

State of water molecules in crystal hydrates containing salts of certain elements. Dokl. AN SSSR 148 no.1:86-88 Ja '63.
(MIRA 16:2)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanov. Predstavleno akademikom I.I. Chernyayevym.
(Water) (Ionic crystals) (Salts)

ANDREYEVA, M.V.; KHALDIN, V.G.; ANDREYEV, S.N.

Spectral absorption band structure of $Co(H_2O)_6^{2+}$ and $Co(OR_1R_2)_6^{2+}$ in solutions in the region 25 000 - 13 000 cm^{-1}. Dokl. AN SSSR 155 no.1:115-117 Mr '64. (MIRA 17:4)

1. Leningradskiy tekstil'nyy institut im. S.M.Kirova. Predstavleno akademikom I.I.Chernyayevym.

ANDREYEV, S.N.; SAPOZHNIKOVA, O.V.

Near hydrate surroundings of Cu^{2+} ions in diluted aqueous solutions of Cu (II) salts. Dokl. AN SSSR 156 no. 4:855-857 Je '64.
(MIRA 17:6)

1. Leningradskiy tekstil'nyy institut im. S.M.Kirova. Predstavleno akademikom I.I.Chernyayevym.

ANDREYEV, S.N.; SAPOZHNIKOVA, O.V.

Near hydrate surroundings of Cu^{2+} ions in diluted aqueous solutions of Cu (II) salts. Dokl. AN SSSR 156 no. 4:855-857 Je '64.
(MIRA 17:6)

1. Leningradskiy tekstil'nyy institut im. S.M.Kirova. Predstavleno akademikom I.I.Chernyayevym.

ANDREYEV, S.N.; SAPOZHNIKOVA, O.V.

Composition and structure of Cu (II) chlorides. Zhur.neorg.khim. 10 no.11:2538-2543 N '65. (MIRA 18:12)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti imeni S.M.Kirova. Submitted May 9, 1964.

ACC NR: AP7008113 SOURCE CODE: UR/0020/67/172/004/0837/0840

AUTHOR: Andreyev, S. N.; Sapozhnikova, O. V.

ORG: Leningrad Institute of Textile and Light Industry im. S. M. Kirov (Leningradskiy institut tekstil'noy i legkoy promyshlennosti)

TITLE: Coordination equilibria in the system Cu^{2+}.aq - HCl - H_2O

SOURCE: AN SSSR. Doklady, v. 172, no. 4, 1967, 837-840

TOPIC TAGS: copper compound, absorption spectrum, coordination chemistry, chemical equilibrium

ABSTRACT: Electronic absorption spectra of the crystals Cs_2CuCl_4, $[(CH_3)_4N]_2 \cdot CuCl_4$ and $[(C_2H_5)_4N]_2CuCl_4$, which differ in the size of the cations located outside the coordination sphere, were studied. The spectra showed that a decrease in the radius of the cation outside the sphere causes a shift of the absorption bands of $[CuCl_4]^{2-}$ ions into the high-frequency range, the form of the spectral absorption curves remaining the same. This leads to the assumption that the electronic absorption spectrum of the system Cu^{2+}.aq - HCl - H_2O at C_{HCl} = 5-12 M is due to the formation of tetrahedral complexes $[CuCl_4]^{2-}$ in the solution. A change in HCl concentration from 10^{-4} to 20 M in solutions of salts of divalent copper involves the following processes:

$$[Cu(H_2O)_6]^{2+} \rightleftarrows [Cu(H_2O)_5Cl]^{+} \rightleftarrows [Cu(H_2O)_4Cl_2] \rightleftarrows [Cu(H_2O)_3Cl_3]^{-} \rightleftarrows$$
$$\rightleftarrows [Cu(H_2O)_2Cl_4]^{2-}\text{-trans} \rightleftarrows [CuCl_4]^{2-}\text{-tetrahed.} \rightleftarrows [\ldots CuCl_6 \ldots].$$

 UDC: 535.34:541.49:546.562

ACC NR: AP7008113

The reactions of stepwise substitution of Cl^- ions for water in the inner sphere of hydrated Cu^{2+} cations take place in solutions where HCl is dissociated almost completely. The direction of these processes is determined by the concentration of Cl^- ions. The coordination equilibria $[Cu(H_2O)_2Cl_4]^{2-} \rightleftharpoons [CuCl_4]^{2-}$-tetrahedral and $[CuCl_4]^{2-}$-tetrahedral $\rightleftharpoons [CuCl_2]_n$ can be observed only at a high concentration of undissociated HCl molecules. It is postulated that in the former process the HCl molecules act as dehydrating agents, and in the latter, they solvate the chloride anions. The paper was presented by Academician Chernyayev, I. I., 13 April 1966. Orig. art. has: 3 figures.

SUB CODE: 07/ SUBM DATE: 12Apr66/ ORIG REF: 001/ OTH REF: 011

2/2

2/2

88134

S/019/60/000/023/071/116
A154/A027

26.4300

AUTHORS: Solov'yev, V.I., Andreyev, S.P.

TITLE: A Unit for Statically Testing Aircraft Flaps

PERIODICAL: Byulleten' izobreteniy, 1960, No. 23, p. 48

TEXT: Class 42k, 27. No. 134063 (658449/40 of March 2, 1960). 1. This unit for statically testing aircraft flaps is distinguished by the fact that, in order to test the flaps for static endurance and at the same time automatically load them in the wing system according to a given program, the unit is made in the form of a colonnade to which is attached one end of the loaded wing with the tested flap, which is controlled by a transmission with an automatic programming device, and a hydraulic actuator carrying out the program loading by means of potentiometric follow-up systems and having an electronic amplifying device and hydraulic force exciters (silovyye vozbuditeli) which act upon the skin of the wing and the flap via lever systems and canvas straps. 2. A unit as given in 1., distinguished by the fact that,

Card 1/2

ANDREYEV, S. P.

"A Complex Method of Determining Flying Capacity".

Voyenno Meditsinskiy Zhurnal, No. 4, 1962

ANDREYEV, S., gvardii general-mayor aviatsii zapasa

Pavel Rychagov. Av.i kosm. 45 no.3:76-77 Mr '63. (MIRA 16:3)
(Rychagov, Pavel Vasil'evich, 1911-1941)

Bibl

ANDREYEV, S.P., starshiy inzhener-zemleustroitel' (Shimskiy rayon, Novgorodskoy oblasti)

Interprovincial Conference on Land Management. Zemledelie 24 no.8:93 Ag '62. (MIRA 15:9)
(Russia, Northwestern—Land—Congresses)

ANDREYEV, S. S. DECEASED 1963/3

SEISMOLOGY (C 1962)

DERYAGIN, B.V.; ZAKHAVAYEVA, N.N.; ANDREYEV, S.V.

Flow of a fluid with high molecular weight and of its solutions in a thin layer. Inzh.-fiz.zhur. no.5:92-95 My '62. (MIRA 15:7)

1. Institut fizicheskoy khimii AN SSSR, Moskva.
(Laminar flow)

ANDREYEV, Sergey Vasil'yevich; MARTENS, Boris Konstantinovich; TRUSHINSKIY, Aleksandr Nikolayevich; IVANOV, B.N., inzh., red.; FREGER, D.P., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Multipositional electromechanical programmed controller; temperature, humidity, and lighting] Mnogopozitsionnyi elektromekhanicheskii programmnyi reguliator; temperatury, vlazhnosti i osveshchennosti. Leningrad, 1961. 18 p. (MIRA 14:8)
(Electric controllers)

ANDREYEV, S.V.; MARTENS, B.K.; TRUSHINSKIY, A.N.

Using electronic-bridge devices for operating with semiconductor resistances. Priborostroenie no.10:17-19 O '61. (MIRA 14:9)
(Bridge circuits) (Electronic instruments)

ANDREYEV, S. V.

PHASE I BOOK EXPLOITATION SOV/5590

Konferentsiya po poverkhnostnym silam. Moscow, 1960.

Issledovaniya v oblasti poverkhnostnykh sil; sbornik dokladov na konferentsii po poverkhnostnym silam, aprel' 1960 g. (Studies in the Field of Surface Forces; Collection of Reports of the Conference on Surface Forces, Held in April 1960) Moscow, Izd-vo AN SSSR, 1961. 231 p. Errata printed on the inside of back cover. 2500 copies printed.

Sponsoring Agency: Institut fizicheskoy khimii Akademii nauk SSSR.

Resp. Ed.: B. V. Deryagin, Corresponding Member, Academy of Sciences USSR; Editorial Board: N. N. Zakhavayeva, N. A. Krotova, M. M. Kusakov, S. V. Norpin, P. S. Prokhorov, M. V. Talayev and G. I. Fuks; Ed. of Publishing House: A. L. Bankvitser; Tech. Ed.: Yu. V. Rylina.

PURPOSE: This book is intended for physical chemists.

Card 1/8

4 >

Studies in the Field of Surface Forces (Cont.) SOV/5590

COVERAGE: This is a collection of 25 articles in physical chemistry on problems of surface phenomena investigated at or in association with the Laboratory of Surface Phenomena of the Institute of Physical Chemistry of the Academy of Sciences USSR. The first article provides a detailed chronological account of the Laboratory's work from the day of its establishment in 1935 to the present time. The remaining articles discuss general surface force problems, polymer adhesion, surface forces in thin liquid layers, surface phenomena in dispersed systems, and surface forces in aerosols. Names of scientists who have been or are now associated with the Laboratory of Surface Phenomena are listed with references to their past and present associations. Each article is accompanied by references.

TABLE OF CONTENTS:

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III. SURFACE FORCES IN THIN LAYERS OF LIQUIDS

S/081/61/000/021/017/094
B102/B138

AUTHORS: Deryagin, B. V., Zakhavayeva, N. N., Andreyev, S. V., Milovidov, A. A., Khomutov, A. M.

TITLE: Filming the flow of thin layers of polymer solutions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 65, abstract 21B525 (Sb. "Issled. v. obl. poverkhnostnykh sil", M., AN SSSR, 1961, 139-142)

TEXT: The authors improve on an earlier method (RZhKhim, 1954, no. 12, 30393; 1957, no. 23, 74075) for investigating the rheological properties of thin layers of solutions by blowing, introducing the use of moving pictures. The apparatus is described. It gives a complete picture of the process of blowing the liquid layer. Photographs of the interference bands are shown for turbine oil, vinyl polymer and its solutions in turbine oil. [Abstracter's note: Complete translation.]

Card 1/1

ANDREYEV, S.V.; MARTENS, B.K.; TRUSHINSKIY, A.N.

Semiconductor device for automatic remote measurement and regulation of temperature. Izm.tekh. no.11:23-27 N '61. (MIRA 14:11)

(Thermostat)

S/170/62/005/005/010/015
B104/B102

AUTHORS: Deryagin, B. V., Zakhavayeva, N. N., Andreyev, S. V.

TITLE: The laminar flow of high-molecular liquids and their solutions

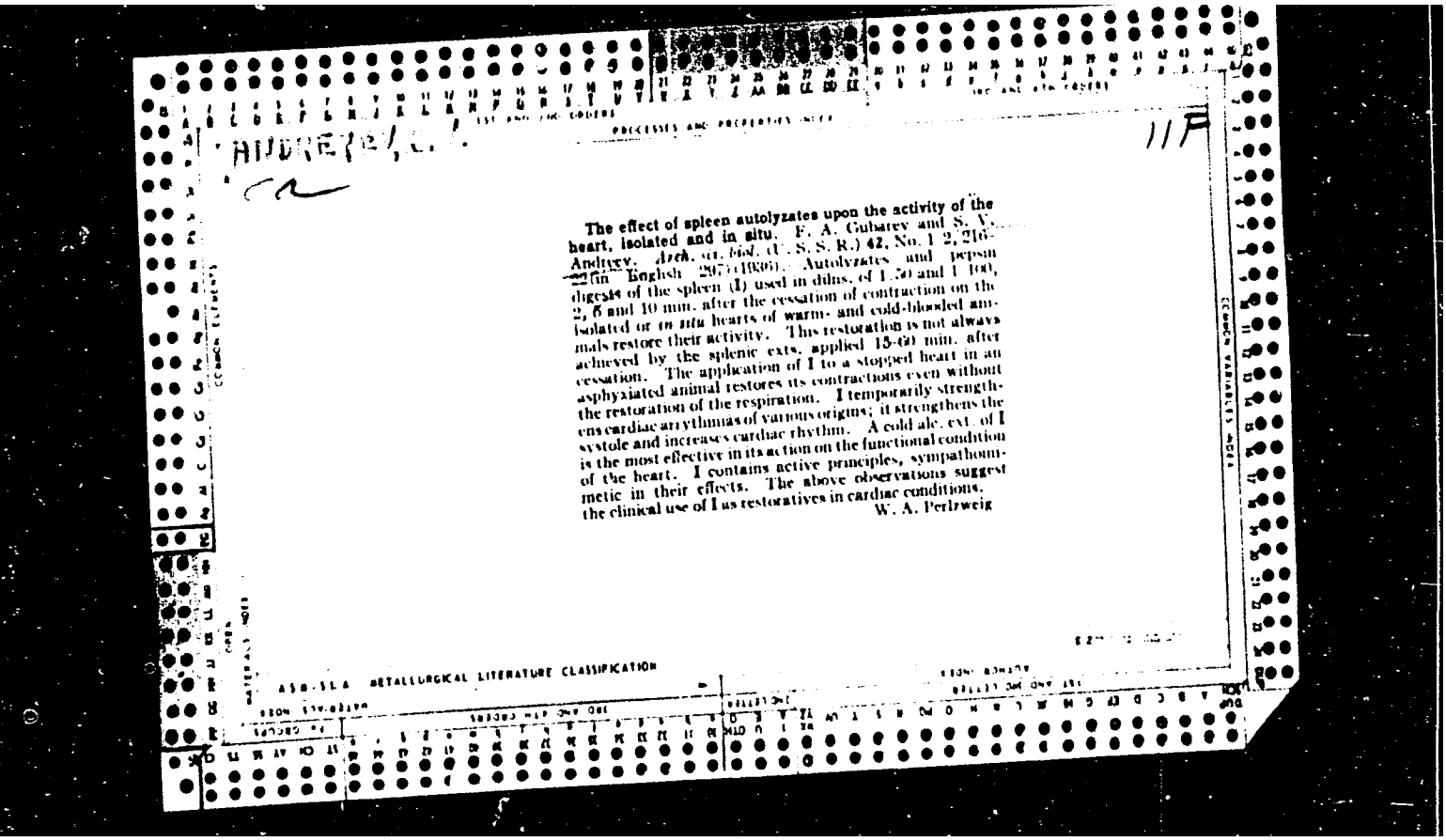
PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 5, 1962, 92 - 95

TEXT: This is a survey of the authors' papers on a method for investigating thin films of liquids flowing on a solid and for studying their properties, devised in the laboratoriya poverkhnostnykh yavleniy IFKh AN SSSR (Laboratory of Surface Effects IFKh AS USSR), (cf. e.g. Deryagin et al. DAN SSSR, 4, 101, 1955). There are 2 figures.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moscow (Institute of Physical Chemistry AS USSR, Moscow)

SUBMITTED: August 7, 1961

Card 1/1



The effect of spleen autolyzates upon the activity of the heart, isolated and in situ. F. A. Gubarev and S. V. Andreyev. *Arch. sci. biol.* (U. S. S. R.) **42**, No. 1-2, 216-22 (in English 207) (1936). Autolyzates and pepsin digests of the spleen (I) used in dilns. of 1:50 and 1:100, 2, 5 and 10 min. after the cessation of contraction on the isolated or *in situ* hearts of warm- and cold-blooded animals restore their activity. This restoration is not always achieved by the splenic exts. applied 15-60 min. after cessation. The application of I to a stopped heart in an asphyxiated animal restores its contractions even without the restoration of the respiration. I temporarily strengthens cardiac arrythmias of various origins; it strengthens the systole and increases cardiac rhythm. A cold alc. ext. of I is the most effective in its action on the functional condition of the heart. I contains active principles, sympathomimetic in their effects. The above observations suggest the clinical use of I as restoratives in cardiac conditions.
W. A. Perlzweig

ANDREYEV, S.V.

Effect of conditioned reflex on modifications of arterial pressure, experimental study. Zh. vysshei nerv. diest. 2 no.5:723-733 Sept-Oct 1952. (CLML 23:4)

1. Pathophysiological Laboratory of the Institute of Therapy of the Academy of Medical Sciences USSR.

ANDREYEV, S.V., VADKOVSKAYA, Yu. D., GLEBOVA, M.S.

Effect of renin preparations on blood pressure in experimental conditions. Tr. Akad. med. nauk SSSR Vol.20: 56-75 1952. (CIML 25:5)

1. Of the Pathophysiology Laboratory (Head -- S.V. Andreyev, Doctor Medical Sciences), Institute of Therapy (Director -- A.L. Myasnikov, Active Member AMS USSR), Academy of Medical Sciences USSR.

ANDREYEV, S.V.

Pathogenesis of hypertension. Zhur.vys.nerv.deiat. 4 no.1:55-65 Ja-F '54. (MLRA 7:8)

1. Institut terapii Akademii meditsinskikh nauk SSSR.
(HYPERTENSION, etiology and pathogenesis,
*nervosism)
(NERVOUS SYSTEM, pathology,
*nervosism in pathogen. of hypertension)

2917. ANDREYEV S. V. Inst. of Pharmacol. and Chemother., Acad. of Med. Sci., of the USSR, Moscow *Reactivation of the human heart after death (Russian text)* Moscow 1955 (224 pages) Tables 26 Illus. 37

Numerous data on reestablishment of contractile and bioelectrical action of the human heart after death from a variety of diseases are given. Complete or partial recovery of function of the human heart was obtained in 70% of experiments. Action of the whole heart was reestablished in 28 experiments and action of ventricles in 91 (out of a total of 240). In one experiment the action of atria and ventricles of the heart of a premature baby was started again 99 hr. after death. Experiments were carried out not only on the isolated heart but also on cadavers. The sequence in which contractility of the heart chambers is reestablished and its partial or complete degree depends mainly on the character and peculiarities of the pathological process. For instance, the contractility reappears first in the left ventricle in man in whom the lungs and pulmonary vessels were affected. Reestablishment of human heart contractility depends also on age characteristics and on the time that has elapsed after death. Reestablishment of bioelectrical activity and ECG waves in human heart shows 3 periods. Low-voltage fluctuations appear in the first period, high-voltage ones in the 2nd, and in the 3rd there is differentiation of waves and formation of a characteristic human ECG. Each heart chamber has its own ECG. Activity of extracardiac nerves and their influence

2917 CONT.

on the rhythm and biological currents of the myocardium are retained for many hours after death. Estimation of phosphate complexes in human myocardium in its different functional states was carried out. The composition of the fluid that flows out of the coronary vessels and the dynamics of the myocardial carbohydrate-phosphate metabolism change according to the character of contractions — fibrillatory or rhythmic. Coronary vessels of man show a long survival period — about 5 days (111 hr.) after death. Removal of the parabiotic state is a basis of reestablishment of the heart action. The possibility of experimental reproduction of stages of parabiosis by deliberate impairment of the heart nutrition is one of the proofs of the presence of parabiosis in the human heart.

ANDREYEV, S. V.
USSR/Medicine - Physiology FD-2269

Card 1/1 Pub 17-20/20

Author : Andreyev, S. V.; Trofimova, Z. G.; and Barsukova, A. I.; with the assistance of Arkhipova, N. A.

Title : On an investigation of the coronary vessels of the heart of a dog by means of motion picture photography

Periodical : Byul. eksp. biol. i med. 3, 76-79, Mar 1955

Abstract : Gives details of operative procedure for opening the thorax of a dog, inserting a pericardial cannula, and photographing the heart in action by means of motion picture photography. Describes regularly occurring changes in the coronary vessels of the heart observed on enlargement and examination of the picture frames. Photograph; motion-picture photographs. Eleven references; 10 USSR, 7 after 1940.

Institution: Laboratory of Pathophysiology (Head-Prof. S. V. Andreyev) of the Institute of Pharmacology, Experimental Chemotherapy and Chemoprophylaxis (Director-Prof. V. V. Zakusov, Member of the Academy of Medical Sciences USSR) of the Academy of Medical Sciences USSR and the Department of Scientific Cinephotodocumentation (Head - N. A. Kim) of the Academy of Medical Sciences USSR

Submitted :

ANDREYEV, S.V.

Hypotensive function of pancreas. S. V. Andreev, N. P. Speranskaya, I. D. Kobkova, and N. I. Gavrilov. *Doklady Akad. Nauk S.S.S.R.* 105, 848-51(1955).—Successive and repeated treatment of freshly frozen and minced beef pancreas with 96% EtOH and dry Me_2CO resulted in isolation of an active principle, hypotonin GASK, predominantly in fraction ppld. with 37% Me_2CO. The repression of arterial pressure induced by it in dogs is prolonged and rapid; diastolic pressure is also reduced.

G. M. Kosolapoff

MD (3)

ANDREYEV, Sergey Vasil'yevich, doktor meditsinskikh nauk, professor; BENYUMOV, O.M., redaktor; ISLENT'YEVA, P.G., tekhnicheskiy redaktor.

[The activity of the heart and methods for investigating it] Deiatel'nost' serdtsa i metody ee issledovaniia. Moskva, Izd-vo "ZNANIE", 1956. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser. 3, no.16). (MIRA 9:6)
(HEART)

Andreyev, S.V.

ANDREYEV, S.V., prof.

S.I.Chechulin; 1894-1937. Pat.fiziol. i eksp.terap. 1 no.5:77-78 S-O '57. (MIRA 10:12)
(CHECHULIN, SERGEI IONOVICH, 1894-1937)

ANDREYEV, S.V.

Some ways of developing morphological investigations. Sbor. nauch. trud. GIDUV no. 14:245-251 '58. (MIRA 13:10)
(MORPHOLOGY)

SOV/20-123-2-11/42

AUTHORS: Priorov, N. N., Member of the Academy of Medical Sciences, USSR, Andreyev, S. V., Cherkasova, T. I.

TITLE: The Role of Cobalamine in the Restoration of the Function of the Arm of After Damage to Peripheral Nerves (Znacheniye kobalamina dlya vosstanovleniya funktsiy ruki cheloveka posle pereryva periphericheskikh nervov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 312-315 (USSR)

ABSTRACT: The acceleration of the regeneration of nerve tissue is one of the most urgent problems in the practice of restoring normal functions. In man this period stretches for 3 - 7 years, if one extremity is injured. The methods of stimulation applied at present of the regenerative process in nerves do not achieve a complete restoration of the sensorial and motoric functions (Refs 2, 4, 5, 8, 10). In man and in animals the severing of one nerve or several nerves leads to complicated and involved modifications in the whole organism. Degenerative modifications develop in various parts of the peripheral, vegetative and central nerve system (Refs 6, 7).

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The Role of Cobalamine in the Restoration of the Function of the Arm of Patients After Damage to Peripheral Nerves

There is reason to believe that the regeneration of one single injured nerve is sufficient for the removal of all pathological consequences of the trauma. This is presumably true in particular in cases, where a considerable time has elapsed since the traumatic effect and the pathological modifications in the organism are already well established. Hence a simultaneous and multi-directional stimulation of the nerve-, the metabolism-, the blood vessel-, the haemodynamical and of other functions is required for a complete re-establishment of the activity of a traumated extremity. It proceeds from experimental evidence collected in the Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR (Institute of Pharmacology and Chemical Therapy, Academy of Medical Sciences, USSR) (Ref 1) that the widely effective vitamin B_{12} (cobalamine) does not only accelerate the regeneration of the injured peripheral nerves in rats, but also stimulates the re-production of the motoric platelets in the muscles surrounding the nerve. This is also true for blood vessels and for other organs and functions. (Refs 9, 11-13). It was the purpose of this paper to seek an understanding of the role played by cobalamine in the regeneration of one

The Role of Cobalamine in the Restoration of the Function of the Arm of Patients After Damage to Peripheral Nerves

or of two severed nerves in the human hand and in the re-establishment of the function of the hand. 50 persons were incorporated in this test: I) (37 persons) who suffered from a complete anatomical severance of a nerve, and II) (13 persons) with a simultaneous severance of the nervus medianus and ulnaris. Cobalamine was injected under the skin of the shoulder. From 25 to 30 injections were administered and this treatment was repeated after a lapse of 10 - 15 days for 2 - 4 times. The experience collected shows that an increase of the cobalamine dosis from 15 - 30 to 200 µg per injection seems advisable. A comparison was carried out between the clinical observations and the dynamics of the physiological modifications of 29 persons of group I. It appeared that the introduction of cobalamine into the method of treatment considerably accelerates the initial features of regeneration and of a restoration of normal functions. A complete restoration of sensitivity together with a partial restoration of movability was found in 2 persons, who received injections of thiamin. In cases where patients

The Role of Cobalamine in the Restoration of the Function of the Arm of Patients After Damage to Peripheral Nerves

who were given cobalamine exhibited an incomplete re-innervation of muscles an acceleration of compensatory adaptions and a decrease of physiological displacements in the neuromuscular apparatus was observed. There are 2 figures and 13 references, 10 of which are Soviet.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut travmatologii i ortopedii
(Central Scientific Research Institute for Traumatology and Orthopedics)

SUBMITTED: May 4, 1958

Card 4/4

ANDREYEV, S.V.; TROFIMOVA, Z.G. (Moskva)

New method for inducing experimental myocarditis in rats. Pat.fiziol. i eksp.terap. 3 no.6:35-39 N-D '59. (MIRA 13:3)

1. Iz laboratorii patofiziologii i farmakologii serdechno-sosudistoy sistemy (zaveduyushchiy - prof. S.V. Andreyev) Instituta farmakologii i khimioterapii AMN SSSR (direktor - deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov).
(MYOCARDITIS exper.)
(TOXINS AND ANTITOXINS pharmacol.)

ANDREYEV, S.V.; YEVSTIGNEYEVA, R.P.; MIRZABEKOV, A.M.; SPERANSKAYA, N.P.; PREOBRAZHENSKIY, N.A.

Similarity between the chemical structure and biological activity of ribonuclease and increpan. Zhur.ob.khim. 30 no.7:2433 Jl '60. (MIRA 13:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii i institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR.

(Ribonuclease)

ANDREYEV, S. V., and YEVSTIGNEYEVA, R. P. (USSR)

"Hypotensive Activity of Increpane and Ribonuclease."

Report presented at the 5th International Biochemistry Congress, Moscow, 10-16 Aug 1961

ANDREYEV, Sergey Vasil'yevich, doktor med. nauk; NEKHLYUDOVA, A.S., red.; SAVCHENKO, Ye.V., tekhn. red.

[Our heart] Nashe serdtse. Moskva, Izd-vo "Znanie," 1961. 36 p. (Narodnyi universitet kul'tury: Estestvenno-nauchnyi fakul'tet, no.19) (MIRA 15:1)

(HEART)

ANDREYEV, Sergey Vasil'yevich, doktor med. nauk, prof.; YUSHINA, Yu.G., red.; STAROSTENKOVA, M.M., red.izd-va; RAKITIN, I.T., tekhn. red.

[New data on the heart and blood vessels] Novoe o serdtse i sosudakh. Moskva, Izd-vo "Znanie," 1961. 45 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.8, Biologiia i meditsina, no.19) (MIRA 14:11)

(CARDIOVASCULAR SYSTEM--DISEASES)

ANDREYEV, S.V.

Cyancobalamine and reparative processes in the organism. Vit. res. i ikh isp. no.5:168-174 '61. (MIRA 15:1)

1. Institut serdechno-sosudistoy khirurgii AMN SSSR, Moskva.
(CYANCOBALAMINE) (REGENERATION (BIOLOGY))

PRIOROV, N.N. [deceased]; ANDREYEV, S.V.; CHERKASOVA, T.I.

Use of cyanocobalamine in restoring functions of the peripheral nerve after a suture. Vit. res. i ikh isp. no.5:175-188 '61. (MIRA 15:1)

1. TSentral'nyy institut travmatologii i ortopedii Ministerstva zdravookhraneniya SSSR, Moskva.
(CYANOCOBALAMINE) (NERVES, PERIPHERAL)
(REGENERATION (BIOLOGY))

ANDREYEV, S.V.; TROFIMOVA,Z.G.

Experimental therapy of myocarditis. Uch.zap.Inst.farm.i khimioter. AMN SSSR no.2:223-251 '60. (MIRA 15:10)

1. Laboratoriya patofiziologii i farmakologii serdechno-sosudistoy sistemy (zav. professor S.V.Andreyev).
(HEART--DISEASES)

ANDREYEV, S.V.

Energy of radiations absorbed by the human body during radon baths. Med.rad. no.6:29-37 '61. (MIRA 15:1)

1. Iz radiologicheskoy laboratorii (zav. - prof. Ye.S. Shchepot'yeva) TSentral'nogo instituta kurortologii i fizioterapii Ministerstva zdravookhraneniya SSSR.
(RADON--THERAPEUTIC USE) (RADIATION--DOSAGE)

ANDREYEV, S. V.

Small-sized apparatus for radon inhalations. Med. rad. no.2: 83-85 '62. (MIRA 15:7)

1. Iz radiologicheskoy laboratorii (zav. - prof. Ye. S. Shchepot'yeva) TSentral'nogo nauchno-issledovatel'skogo instituta kurortologii i fizioterapii.

(RADON--THERAPEUTIC USE)
(INHALATION THERAPY--EQUIPMENT AND SUPPLIES)

ANDREYEV, S.V.; CHECHULIN, Yu.S.; KOBKOVA, I.D.; LUKIN, Yu.V.

Reactivity and metabolism of cardiac vessels during myocardial infarction. Cor vasa 5 no.1:18-29 '63.

1. The Institute of Cardiovascular Surgery, Academy of Medical Sciences, Moscow.

(MYOCARDIAL INFARCT) (CORONARY VESSELS) (MYOCARDIUM)
(PHYSIOLOGY) (GLYCERYL TRINITRATE) (AMINOPHYLLINE)
(RIBONUCLEASE) (ASPARTATE AMINOTRANSFERASE)
(PROTEIN METABOLISM)

ANDREYEV, S.V.

Technique of determining the absorbed radiation dosage in whole-body alpha therapy and some results for peroral administration of radon water. Med. rad. 8 no.9:69-76 S'63. (MIRA 17:4)

1. Iz Radiologicheskoy laboratorii (zav. - prof. Ye.S. Shenopet'yeva) Tsentral'nogo instituta kurortologii i fizioterapii.

L 48565-65 EWG(j)/EWG(k)/EWT(l)/FS(v)-3/EWG(v)/EWG(a)-2/EWG(c) Pc-4 DD

ACCESSION NR: AR5008618 S/0299/65/000/004/M023/M023

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 4M130

AUTHOR: Andreyev, S. V.

TITLE: The restoration of contractile activity and the prospects for cardiac transplantation in man and animals

CITED SOURCE: Eksperim. khirurgiya i anesteziol., no. 4, 1964, 31-36

TOPIC TAGS: cardiac transplant, cardiac contractility, cardiac innervation, heart muscle, tissue incompatibility

TRANSLATION: The author studied the possibility of restoring the contractile activity of the heart and the reactivity of the cardiac vessels and myocardium after death in the hearts of 397 human subjects of various ages who had died from various diseases. In the author's opinion, the main obstacle to a solution of the problem of cardiac transplantation in man is tissue or protein incompatibility and the difficulty of rapid reinnervation of the transplanted organ.

N. S.

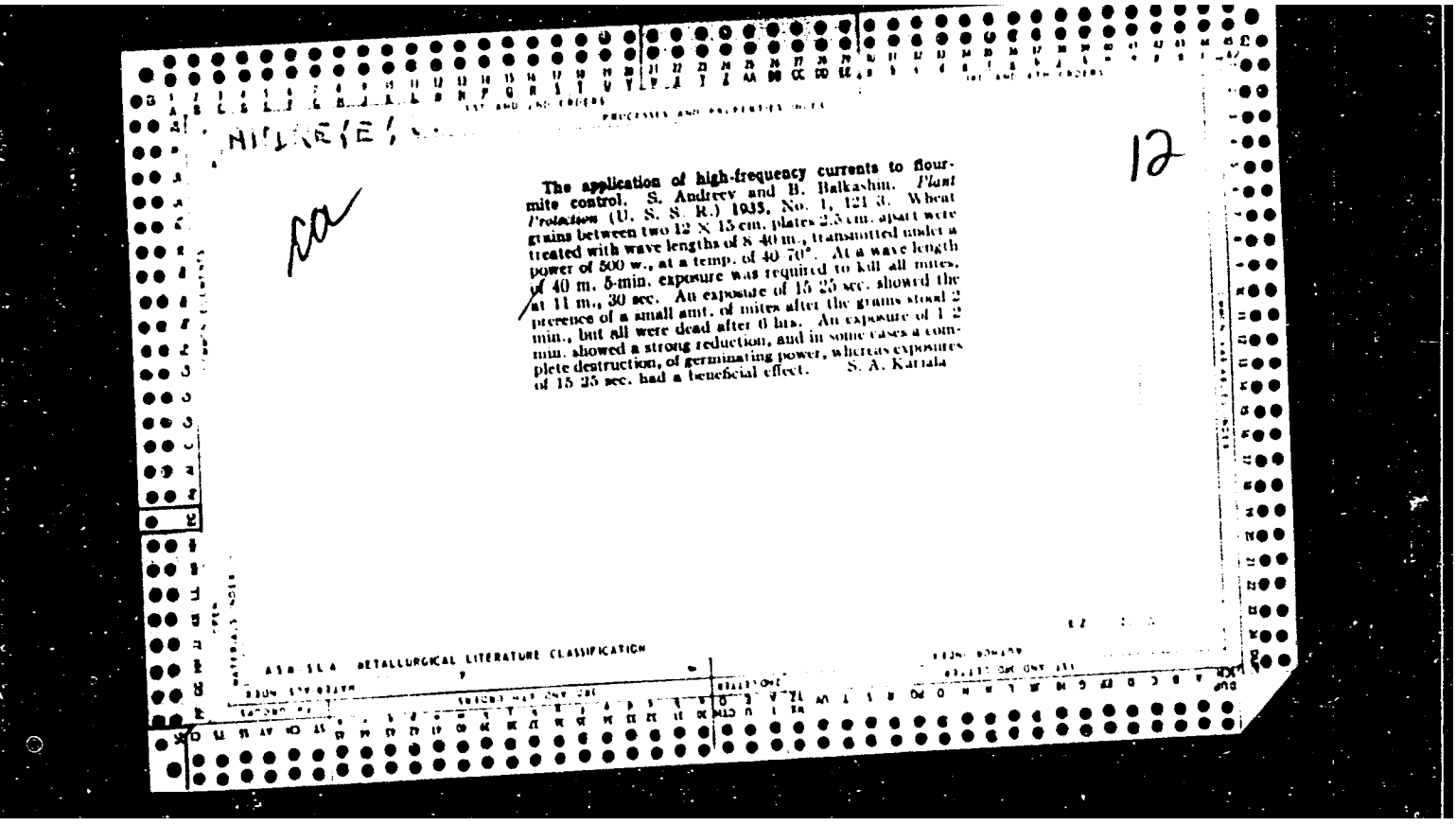
SUB CODE: LS ENCL: 00

Card 1/1

ANDREYEV, S.V.; SAMOYLOVA, Z.I.; MARTENS, B.K.

Possibilities of using γ irradiation for the sterilization of corn ear worm for the reduction of its population. Radiobiologiia 4 no.4:624-626 '64. (MIRA 17:11)

1. Vsesoyuznyy institut zashchity rasteniy, Leningrad.



The application of high-frequency currents to flour-mite control. S. Andreev and B. Balkashin. *Plant Protection* (U. S. S. R.) 1935, No. 1, 121-3. Wheat grains between two 12 × 15 cm. plates 2.5 cm. apart were treated with wave lengths of 8-40 m., transmitted under a power of 500 w., at a temp. of 40-70°. At a wave length of 40 m. 5-min. exposure was required to kill all mites, at 11 m., 30 sec. An exposure of 15-25 sec. showed the presence of a small amt. of mites after the grains stood 2 min., but all were dead after 0 hrs. An exposure of 1-2 min. showed a strong reduction, and in some cases a complete destruction, of germinating power, whereas exposures of 15-25 sec. had a beneficial effect. S. A. Kartala

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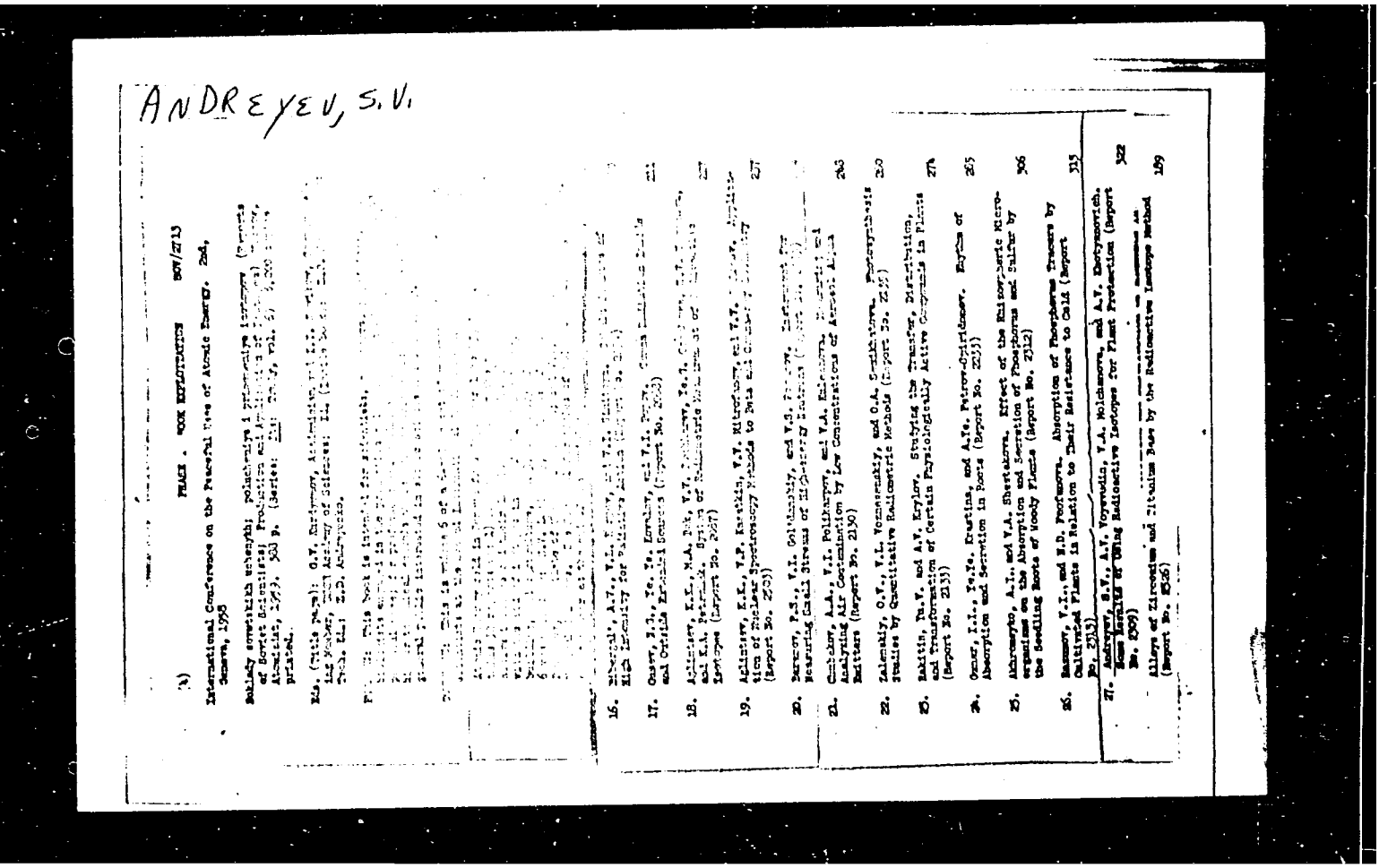
Factors that decrease the efficiency of DDT and similar compounds. P. V. Sazonov and S. V. Andreev. *Dok* *I*
Lady Vsesoyuz. Akad. Sel'sko-Khoz. Nauk im. V.
Lenina **14**, No. 7, 41-8(1949). The compds. were sub-
jected to the rays of a 500-w. lamp emitting from the in-
frared to the violet and to the rays of a quartz lamp of the
type PRK-2 that emitted from the green to the ultraviolet.
To simulate the intensity of the sun's rays, the object was
held 15-20 cm. away from the center of the source of the
rays. House flies were used. The visible rays of the
spectrum do not reduce the toxic strength of the DDT and

similar compds. The strength of the ultraviolet was equal
to 600,000 erg./sq. cm./sec. A 0.5% concn. of the
active ingredients, at 7.5 γ/sq. cm., on 3 hrs. exposure,
loses 1/3 of its toxicity. The loss increases with temp., is
less on murky days, when haze is present, or when dust a
or water vapor is present in the air. Direct sunlight is
extremely deleterious and soil insects may be effectively
handled by mixing the material into the soil. I. S. Jolle



ANDREYEV, S.V.

ANDREYEV, S.V.; MARTENS, B.K.; STEPANOV, A.S.; TRUSHINSKIY, A.N.

Artificial climate chamber for investigations in the field of plant protection. Zashch.rast.ot vred.i bol. 4 no.6:17-18 N-D '59. (MIRA 15:11)

(Plants, Protection of--Research)

MARTENS, B.K., kand.tekhn.nauk; ANDREYEV, S.V., kand.biolog.nauk, nauchnyy red.; VOROB'YEV, G.S., red.izd-va; GURDZHIYEVA, A.M., tekhn.red.

[Using ionizing radiation in agriculture] Ispol'zovanie ioniziruiushchikh izluchenii v sel'skom khoziaistve. Leningrad, O-vo po rasprostraneniiu polit. i nauchn.znanii RSFSR, Leningr.otd-nie, 1960. 26 p. (MIRA 13:9)

(Radiation--Physiological effect)
(Plants, Effect of radioactivity)

ANDREYEV, S. V.,

"The use of Radioisotopes and Radiation in the Field of Plant Protection"

Paper presented at the Symposium on Radioisotopes and Radiation in Entomology, Bombay, India, 5-9 Dec 1960: Under the sponsorship of the Intl. Atomic Energy Commission.

ANDREYEV, S.V.; MARTENS, B.K.

Using nuclear magnetic resonance for determining soil moisture.
Pochvovedenie no.10:112-115 '60. (MIRA 13:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy.
(Nuclear magnetic resonance) (Soil moisture)